January 30, 2003

Certified Mail #9059 2764

Larry Banhart Maintenance Bishop Noll Institute 1519 Hoffman Street Hammond, Indiana 46327

Re: Registered Operation Status, 089-16757-00474

Dear Mr. Banhart:

The application from Bishop Noll Institute, received on November 1, 2002, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-5.5, it has been determined that the following incinerator, to be located at 1519 Hoffman Street, Hammond, Indiana, is classified as registered:

a Morse Boulger, type "0" multiple chamber incinerator, which has a design capacity of 600 pounds of waste per hour. This unit burns natural gas as supplemental fuel.

The following conditions shall be applicable:

- 1. Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following:
  - (a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
  - (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.
- 2. Pursuant to 326 IAC 4-2-2(8)(A) (Incinerators), incinerators with a maximum refuse-burning capacity of two hundred (200) or more pounds per hour; shall not emit particulate matter in excess of three-tenths (0.3) pounds of particulate matter per one thousand (1,000) pounds of dry exhaust gas at standard conditions corrected to fifty percent (50%) excess air.
- 3. Pursuant to 326 IAC 9-1-2(3) (Carbon Monoxide Emission Limits), refuse incineration and burning equipment. No person shall cause or allow the discharge of carbon monoxide from refuse incineration or burning equipment, unless the waste stream is burned in a direct-flame afterburner or is controlled by other means approved by the commissioner.

- 4. Pursuant to 326 IAC 4-2-2 (Incinerators), this natural gas incinerator, rated at 600 lbs/hr shall:
  - (a) Consist of primary and secondary chambers or the equivalent.
  - (b) Be equipped with a primary burner unless burning wood products.
  - (c) Comply with 326 IAC 5-1 (Opacity Limitations) and 326 IAC 2 (Permit Review Rules).
  - (d) Be maintained properly as specified by the manufacturer and approved by HDEM and IDEM.
  - (e) Be operated according to the manufacturer's recommendations and only burn waste approved by HDEM and IDEM.
    - (1) Type "0" incinerators shall burn paper and cardboard products only. Plastics, animal and vegetable food waste, rubbish, garbage and any other type of material shall not be burned.
  - (f) Comply with other State and/or local rules or ordinances regarding installation and operation of incinerators.
  - (g) Be operated so that emissions of hazardous materials including, but not limited to, viable pathogenic bacteria, dangerous chemical or gases, or noxious odors are prevented.
  - (h) Not create a nuisance or a fire hazard.
  - (i) Not emit particulate matter (PM) in excess of 0.3 pounds per 1000 pounds of dry exhaust gas corrected to 50% excess air.

The operation of the incinerator shall be terminated immediately upon noncompliance with any of the above-mentioned requirements.

This registration is a new registration issued to this source. The source may operate according to 326 IAC 2-5.5.

An authorized individual shall provide an annual notice to the Office of Air Quality and the Hammond Department of Environmental Management (HDEM) that the source is in operation and in compliance with this registration pursuant to 326 IAC 2-5.5-4(a)(3). The annual notice shall be submitted to:

Compliance Data Section
Office of Air Quality and
100 North Senate Avenue
Indianapolis, IN 46206-6015

Hammond Department of Environmental Management Air Pollution Control Division 5925 Calumet Avenue Hammond, Indiana 46320

no later than March 1 of each year, with the annual notice being submitted in the format attached.

Bishop Noll Institute Page 3 of 4
Hammond, Indiana 089-16757-00474

An application or notification shall be submitted in accordance with 326 IAC 2 and Hammond Air Quality Control Ordinance 3522 (as amended) to the if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Ronald Novak, Director Hammond Department of Environmental Management

ΚM

cc: Permit Administrator – Mindy Hahn

# Registration Annual Notification

This form should be used to comply with the notification requirements under 326 IAC 2-5.5-4(a)(3).

Company Name:	Bishop Noll Institute
Address:	1519 Hoffman Street
City:	Hammond
Authorized Individual:	Larry Banhart
Phone #:	(219) 932-9058
Registration #:	089-16757-00474

I hereby certify that Bishop Noll Institute is still in operation and is in compliance with the requirements of Registration 089-16757-00474.

Name (typed):	Larry Banhart
Title:	Maintenance
Signature:	
Date:	

# Indiana Department of Environmental Management Office of Air Quality and

# Hammond Department of Environmental Management Air Pollution Control Division

Technical Support Document (TSD) for a Registration

# **Source Background and Description**

Source Name: Bishop Noll Institute

**Source Location:** 1519 Hoffman Street, Hammond, Indiana 46327

County: Lake SIC Code: 8211

Operation Permit No.: 089-16757-00474
Permit Reviewer: Kristina Massey

The Hammond Department of Environmental Management (HDEM) has reviewed an application from Bishop Noll Institute relating to the operation of a Morse Boulger, type "0", multiple chamber incinerator.

# **Permitted Emission Units and Pollution Control Equipment**

The source consists of the following permitted emission units and pollution control devices:

a Morse Boulger, type "0" multiple chamber incinerator, which has a design capacity of 600 pounds of waste per hour. This unit burns natural gas as supplemental fuel.

### **Unpermitted Emission Units and Pollution Control Equipment**

There are no unpermitted facilities operating at this source during this review process.

# **Existing Approvals**

The source has been operating under previous approvals including, but not limited to, the following:

OP 01967, issued on January 15, 2002.

All conditions from previous approvals were incorporated into this permit.

# **Stack Summary**

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
Incinerator	Incineration	40	2.25	N/A	N/A

# **Enforcement Issue**

There are no enforcement actions pending.

#### Recommendation

The staff recommends to the Commissioner that the operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on November 1, 2002.

#### **Emission Calculations**

See Appendix A of this document for detailed emissions calculations (one (1) page).

#### **Potential To Emit**

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)
PM	9.198
PM-10	6.176
SO <sub>2</sub>	3.285
VOC	3.942
CO	13.14
NO <sub>x</sub>	3.942

The potential to emit (as defined in 326 IAC 2-7-1(29)) of all criteria pollutants is less than 100 tons per year and less than 25 tons per year of VOC in Lake County. Therefore, the source is not subject to the provisions of 326 IAC 2-7. The Particulate Matter (PM) and Particulate Matter less than 10 microns (PM-10) have a potential to emit greater than five (5) tons per year and less than twenty-five (25) tons per year therefore, it is subject to 326 IAC 2-5 – Registration.

# **Actual Emissions**

The following table shows the actual emissions from the source. This information reflects the 1998 HDEM emissions.

Pollutant	Actual Emissions (tons/year)
PM	0.063
PM-10	0.042
SO <sub>2</sub>	0.225
VOC	0.027
CO	0.090
NO <sub>x</sub>	0.270
HAP (specify)	0

# **County Attainment Status**

Bishop Noll Institute 1519 Hoffman Street, Hammond, Indiana Permit Reviewer: Kristina Massey

The source is located in Lake County.

Pollutant	Status
PM-10	Moderate Nonattainment
SO <sub>2</sub>	Primary Nonattainment
NO <sub>2</sub>	Unclassifiable/Attainment
Ozone	Severe Nonattainment
CO	Unclassifiable/Attainment
Lead	Unclassifiable/Attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Lake County has been designated as nonattainment for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.
- (b) Lake County has been classified as nonattainment for PM-10 and SO<sub>2</sub>. Therefore, these emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.

#### **Source Status**

Existing Source PSD, Part 70 or FESOP Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	0.920
PM10	0.618
SO <sub>2</sub>	3.285
VOC	0.394
CO	1.314
NO <sub>x</sub>	3.942

This existing source is **not** a major stationary source because no nonattainment regulated pollutant is emitted at a rate of 100 tons per year, and it is not in one of the 28 listed source categories.

# **Part 70 Permit Determination**

326 IAC 2-7 (Part 70 Permit Program)

This existing source, including the emissions from this permit, is still not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons/year.

This status is based on all the air approvals issued to the source. This status has been verified by the HDEM.

# **Federal Rule Applicability**

(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source. (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

# State Rule Applicability - Entire Source

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of twenty percent (20%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

# State Rule Applicability - Individual Facilities

326 IAC 4-2-2(8)(A) (Incinerator Limitations)

Pursuant to 326 IAC 4-2-2(8)(A) (Incinerators), incinerators with a maximum refuse-burning capacity of two hundred (200) or more pounds per hour, shall not emit particulate mater in excess of three-tenths (0.3) pounds of particulate matter per one thousand (1,000) pounds of dry exhaust gas at standard conditions corrected to fifty percent (50%) excess air.

326 IAC 9-1-2(3) (Carbon Monoxide Emission Limits)

Pursuant to 326 IAC 9-1-2(3) (Carbon Monoxide Emission Limits), refuse incineration and burning equipment. No person shall cause or allow the discharge of carbon monoxide from refuse incineration or burning equipment, unless the waste stream is burned in a direct-flame afterburner or is controlled by other means approved by the commissioner.

#### Conclusion

The operation of this Morse Boulger incinerator shall be subject to the conditions of the attached proposed Registration and Local Operation Permit.

#### ALABAMA POWER LAW (CDS)/EIS CALCULATIONS

Bishop Noll Institute PLANT ID NO: N/A

1519 Hoffman Street INSP DATE:

Hammond, Indiana 46327 CALC DATE: 11/4/02

CALCULATIONS BY: Kristina Massey

YEAR OF DATA: REVIEW

NO. OF POINTS: 1

\*\*NOTES\*\*

EF: EMISSION FACTOR MDR: MAXIMUM DESIGN RATE Ts: STACK DISCHARGE TEMPERATURE

CE: CONTROL EFFICIENCY MDC: MAXIMUM DESIGN CAPACITY UNITS FOR EMISSIONS ARE IN (TPY) EXCEPT WHERE GIVEN

Morse Boulger 6-R Destructor Incinerator

MDR (T/hr): 0.3
YEARLY PROD (T/yr): 180.00

CNTRL DEV: Afterburner

PERMITTED OPERATING HRS: 8760 hr/yr

POTENTIAL EMISSIONS ALLOWABLE COMPANY ACTUAL SCC NO. 5-02-001-01 BEFORE CONTROLS AFTER CONTROLS BEFORE AFTER POLLUTANT CE (%) (lbs/hr) (TPY) (lbs/hr) (TPY) CONTROLS CONTROLS EF(LB/T) (lbs/day) (lbs/hr) (TPY) (gr/dscf) 0.9 2.1000 50.4000 9.1980 0.2100 0.9198 #DIV/0! 5.903 25.8551 0.6300 0.0630 PM10 0.6176 4.7 0.9 1.4100 33.8400 6.1758 0.1410 #DIV/0! 0.0000 0.4230 0.0423 0 SOx 2.5 0 0.7500 18.0000 3.2850 0.7500 3.2850 N/A 0.0000 0.2250 0.2250 NOx 0.9000 21.6000 3.9420 0.9000 3.9420 N/A 0 0.0000 0.2700 0.2700 3 0 0 VOC 21.6000 3.9420 0.0900 0.3942 N/A 0.0270 3 0.9 0.9000 0.0000 0.2700 CO 10 0.9 3.0000 72.0000 13.1400 0.3000 1.3140 N/A 0 0.0000 0.9000 0.0900 #VALUE! **#VALUE! #VALUE! #VALUE!** N/A 0.0000 **#VALUE! #VALUE!** LEAD 0 #VALUE!

For disposal of Type O Waste. Primary Chamber: 0.75 MMBtu/hr Afterburner: 0.8 MMBtu/hr

326 IAC 5-1-2(2)(B): OPACITY SHALL NOT EXCEED 20%

TSP: 326 IAC 4-2-2(8)(A): 0.3 lbs/1,000 lbs of dry exhaust gas at standard conditions corrected to 50% excess air.

CO: 326 IAC 9-1-2(3)

STACK ID (DIAM:HEIGHT): (2.25: 40)

<sup>\*</sup> This point is class Registered according to potential particulate and VOC emissions.

<sup>\*</sup> AVERAGE INCINERATOR EFFICIENCY = 90%